

# Fugitive Dust

## Inside this issue:

Why Control Fugitive Dust?	2
Dust from Around the World!	2
Sources of Fugitive Dust	2
Ways to Control Fugitive Dust	3
Additional Information	4
Other Web Sites of Interest	4

## What Is Fugitive Dust?



**Fugitive dust on a roadway**

Fugitive dust is defined as dust that is not emitted from definable point sources, such as industrial smokestacks. Sources include open fields, roadways and storage piles.

The state regulation that provides for the control of fugitive emissions can be found at <http://www.lrc.ky.gov/kar/401/063/010.htm>.

This regulation applies to any apparatus, operation or road that emits or may emit fugitive emissions provided that the fugitive emissions from such facility are not elsewhere subject to an opacity standard within the Division for Air Quality regulations.

The provisions of this regulation shall not apply to agricultural practices, such as tilling of land or application of fertilizers, which take place on a farm.

What does this mean to you?

If you are a business or operation that can create dust, then you must take every *reasonable precaution* to control it. **You are prohibited from allowing fugitive dust to leave your property. If the majority of your time is spent cleaning up dust, you are not controlling the problem.**

## Reasonable Precautions:

- Slowing down on unpaved roads
- Applying dust control treatments
- Windbreaks and barriers
- Covering of piles
- Monitoring and recording of dust control activities

**Right:** Fugitive dust at a quarry



## Why Control Fugitive Dust?

Besides causing the need for additional cleaning of homes and vehicles, fugitive dust can cause low visibility on unpaved roads, which can lead to accidents. In severe cases, it can interfere with plant growth by clogging pores and reducing light interception. Dust particles are abrasive to mechanical equipment and damaging to electronic equipment, such as computers.

Although generally not toxic, fugitive dust can

cause health problems, alone or in combination with other air pollutants. Infants, the elderly and people with respiratory problems, such as asthma or bronchitis, are most likely to be affected.

Also, not controlling fugitive dust at a worksite can create more hassle for the worksite foreman in response to complaints from neighbors, paperwork, fines and inspections from regional field office branches.



**Example of fugitive dust coating automobiles**

## Dust from Around the World!

**Fact:** Unpaved roads produce about 10 million tons of particulate matter air pollution each year in the United States.

Additionally, while you might think the fugitive dust you create will only affect those within close proximity to your location, a model of dust imports developed by researchers from Harvard and NASA shows that very fine dust can be transported long distances “from Asia to

North America, and from North Africa to Florida, and all the way around the world to Canada and the U.S.”

<http://www.news.harvard.edu/gazette/2006/12.07/05-dust.html>

**Below:** Fugitive dust coating a tabletop in a house.



## Sources of Fugitive Dust

Significant sources of fugitive dust include grain bins, quarries, haul roads and construction sites. In the example of an unpaved road, fugitive dust is created when the vehicle travels down the unpaved road. The larger and faster the vehicle, the more dust it will create. One way of controlling this is with dust suppression, such as water or approved chemicals or gravel at the end of the haul road.

**Right:** Fugitive dust at a worksite





**Left:** Example of fugitive dust on a roadway

## Ways to Control Fugitive Dust

Controlling fugitive dust can include windbreaks and barriers, frequent water applications, application of soil additives, control of vehicle access, vehicle speed restrictions, covering of stockpiles, use of gravel or water at site exit points to remove caked-on dirt from

tires and tracks, washing of equipment at the end of each workday and prior to site removal, wet sweeping of public thoroughfares, covering of any open trucks and work stoppage.

In an average year, approximately 205 violations for

fugitive dust are given out, but a very high number were issued in 2007, most likely due to the severe drought Kentucky experienced. To the right is a comparison of the past four years.

Year	# of
2007	560
2006	209
2005	212
2004	195

**Below:** Water trucks and street scrubbers are excellent ways to help control fugitive dust.



## Additional

### Information:

For additional information regarding compliance with Kentucky's fugitive dust standards or environmental assistance, please contact the Division of Compliance Assistance at 800-926-8111.



Kentucky Division of Compliance Assistance  
300 Fair Oaks Ln.  
Frankfort, KY 40601

Phone: 502-564-0323  
Toll Free: 800-926-8111  
Fax: 502-564-9720  
E-mail: envhelp@ky.gov



Kentucky Division for Air Quality  
803 Schenkel Ln.  
Frankfort, KY 40601

Phone: 502-573-3382  
Fax: 502-573-3787  
www.air.ky.gov



## Other Web Sites of Interest

### Environmental Protection Agency, Office of Air and Radiation

[www.epa.gov](http://www.epa.gov)

### Idaho Department of Environmental Quality

[http://www.deq.state.id.us/air/prog\\_issues/pollutants/dust\\_control\\_plan.pdf](http://www.deq.state.id.us/air/prog_issues/pollutants/dust_control_plan.pdf)

### NASA News

[http://science.nasa.gov/headlines/y2001/ast26jun\\_1.htm](http://science.nasa.gov/headlines/y2001/ast26jun_1.htm)

### Nebraska Department of Environmental Quality

<http://www.deq.state.ne.us/Publications/o/48b60fd4f66c38e05256c55007724ce?OpenDocument>

### Nevada Small Business Development Center

<http://www.nsbdcnep.org/pages/fugitivedust.htm>

### University of Missouri Extension

<http://extension.missouri.edu/xplor/agguides/agengin/go1885.htm>